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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,376	12/03/2003	Shyunichi Koide	.TS 8067 USA	7147
23632	7590	12/01/2006	EXAMINER	
SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463			MCAVOY, ELLEN M	
			ART UNIT	PAPER NUMBER

1764

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,376

Applicant(s)

KOIDE ET AL.

Examiner

Ellen M. McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>22 July 2004</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 13-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Halik et al (3,384,574).

Halik et al ["Halik"] disclose jet fuel compositions prepared from straight run kerosene fractions which contain paraffins in an amount of from about 30 to about 75 weight percent, naphthenes (cyclic paraffins) in an amount of from about 20 to about 50 weight percent and aromatics in an amount of from about 5 to about 30 weight percent. See the table in column 2, top. The tables in columns 11 and 12 set forth catalytically treated charge stocks from which aromatics were removed by silica gel absorption. The examiner is of the position that the compositions set forth containing C<sub>10</sub>-C<sub>18</sub> paraffins, naphthenes, and essentially no aromatics clearly anticipate the kerosene compositions of claims 1, 3, 4 and 7. The remaining dependent claims differ by limiting the carbon

number of the paraffin component, increasing the ratio of paraffins to cycloparaffins and by specifying a smoke point of the composition. However, the examiner is of the position that such modifications would have been obvious to one skilled in the art if so desired.

***Claim Rejections - 35 USC § 103***

Claims 1-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirk, Jr. (3,985,638) in combination with Halik et al (3,384,574) .

Kirk, Jr. discloses jet fuels having high smoke points of at least 35 and low freeze points of less than  $-20^{\circ}\text{F}$  obtained by blending a dearomatized straight run kerosene with a paraffinic component such as n-decane, n-dodecane, hydrogenated propylene tetramer and hydrogenated butylene trimer. See column 1, lines 27-55. Although Kirk, Jr. does not teach that at least 99 wt.% of the kerosene composition contain n-paraffins and/or iso-paraffins and at least one cyclo-paraffins, the prior art compositions appear to be entirely comprised of saturated hydrocarbons or paraffins. Kirk, Jr. teaches that paraffinic straight run kerosene containing 12 to 16 weight percent aromatics can be treated by solvent extraction or by contact with an adsorbent to remove the aromatics. Halik et al ["Halik"] is added to teach that straight run kerosene fractions typically contain a mixture of paraffins, naphthenes (cyclic paraffins) and aromatics in an amount of from 8.2 to 17.0 wt.%. See the table in column 2, top. Thus, the examiner is of the position that the high quality blended jet fuel composition of Kirk, Jr., in view of Halik, meets the compositions of the claims.

***Claim Rejections - 35 USC § 103***

Claims 1-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schreiner et al (5,713,964).

Schreiner et al ["Schreiner"] disclose a low smoke firefighter training liquid hydrocarbon composition containing (a) n-paraffins (n-alkanes) in an amount of from about 95-100 wt.%, cycloparaffins and iso-paraffins, and (b) a volatile iron compound dissolved or dispersed in the liquid hydrocarbon composition in an amount of from about 0.1 to 10 wt.%. See column 2, lines 20-41 and column 4, lines 1-31. Applicants' open-ended claim language "comprising" allows for the addition of other additives to the composition such as the iron component of Schreiner. The examiner is of the position that the liquid hydrocarbon composition of Schreiner appears to meet the limitations of the kerosene composition of the claims. Although a weight ratio of n-paraffins and/or iso-paraffins to the cyclo-paraffins is not set forth, the examiner is of the position that the claimed composition may be the same since it comprises the same components. Although a smoke point is not set forth, the examiner is of the position that the smoke point of the prior art composition may be the same as the claimed composition since since the compositions comprise the same components.

***Claim Rejections - 35 USC § 103***

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlowitz et al (5,689,031) in combination with either Halik et al (3,384,574), Kirk, Jr. (3,985,638), or Schreiner et al (5,713,964).

Berlowitz et al ["Berlowitz"] disclose a clean distillate useful as a diesel fuel or diesel blending stock produced from Fischer-Tropsch wax. The distillate has the properties of at least 95 weight % paraffins, preferably at least 99 weight % paraffins, an isoparaffin to n-paraffin ratio of about 0.3 to 3.0, and essentially nil unsaturates (olefins and aromatics), sulfur and nitrogen. Berlowitz teaches that the product contains essentially nil cyclic paraffins which differs from the claimed invention which comprises at least one cyclo-paraffin and/or alkyl derivative thereof. However, as evidenced by Halik et al, Kirk, Jr. and Schreiner et al set forth above, cyclic paraffins are well-known components in such paraffinic compositions. Thus, having the prior art references before the inventors at the time the invention was made, it would have been obvious to the skilled artisan to have combined the Fischer-Tropsch derived product of Berlowitz with other non-synthetic paraffinic compositions such as those set forth in Halik, Kirk, Jr, and Schreiner. It has been held that it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, here, as paraffinic compositions, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art. *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

### ***Conclusion***

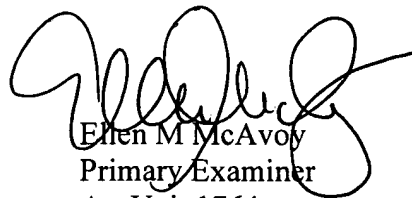
The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ellen M. McAvoy  
Primary Examiner  
Art Unit 1764

EMcAvoy  
November 24, 2006